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OctaForce (MHRM)

Introducing SNMZ insert supporting DOC = 6mm

Powerful 88° rough milling cutter with 8-cutting edges insert!

Raise the Benchmark of Productivity Improvement in Cast Iron & SG rough Milling!





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Cutter Features

OctaForce is a powerful high-depth rough milling cutter with rigid 88-degree cutting approach engineered for aggressive machining of grey and ductile iron, delivering exceptional metal removal rates with superior economy through its 8-edge insert design which can cut **upto 6mm depth of cut!**



88° approach angle geometry
Enables high depths of cut while lowering cutting forces for exceptional stability.

8-Cutting Edge Insert Design
Maximizes tool life while significantly improving machining economy.

High Depth and Strength
Engineered for heavy-duty machining, delivering stable and aggressive cutting with depth of cut up to 6mm.

Reliable Productivity
High metal removal rates up to 0.35mm/tooth with consistent performance.

Insert & Grade advantage

The new SNMZ120412 insert

Supports a **higher depth of cut (Ap) up to 6 mm.**

Maintains the classic **"Eight (8) cutting edges"** per insert.

M Class insert for economical machining.

Tough substrate enhancing stability.

Latest ultra-modern carbide grade **DMP3030K** – Designed for **high productivity** combined with **good reliability** – even at a higher depth of cut.

DMP3030K - Enhanced Fracture Resistance

Built for gray and ductile cast irons.

Multiple nano-thick layered PVD coating coupled with a fine grained super tough substrate for upgraded fracture resistance.

Ensures enhanced wear control and steady insert life even at high speed.



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Application Target

Designed for efficient rough and face milling of gray and ductile cast irons with higher productivity improvement and stable performance, operating consistently at various feed rates.

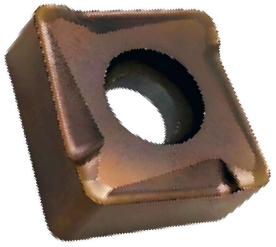
Grade Selection For First Time Right

What is your primary CAST IRON machining goal?

Versatile, balanced performance across a wide range of cutting conditions.

➤ Choose **DMP3030K**

- ✓ Balanced wear resistance & toughness
- ✓ Ideal for general-purpose cast irons
- ✓ **PVD**-coated for sharp cutting edges
- ✓ Multilayer (TiAlN / CrN)



RECOMMENDED Cutting conditions

For CAST IRON machining

Material	Parameters	for DMP3030K		
Gray Cast Iron	Speed (m/min)	150	**200** Ideal condition	250
	Feed (mm/tooth)	0.15	**0.25**	0.35
Ductile Cast Iron	Speed (m/min)	125	**180** Ideal condition	225
	Feed (mm/tooth)	0.12	**0.20**	0.30

Success Stories

Face Milling (MHRM4080RS-Z8 | SNMZ120412ZNER-DMP3030K)

Component: Automotive part
Material: SG Iron (ISO K)
Machine: HMC

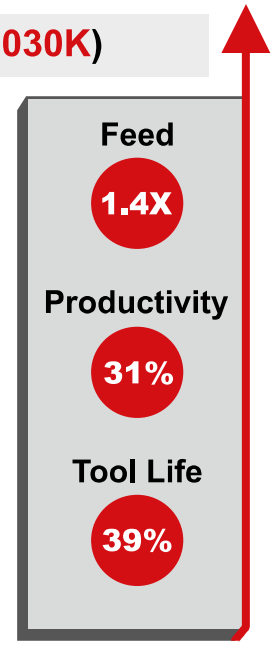
before machining



after machining



	Existing	Motherson
Vc (m/min)	220	230
↑ Fz (mm/tooth)	0.14	0.20
Ap (mm)	3.50	4.00
Cutting edges	8	8
↑ **Tool life**	13 parts	18 parts
↓ **Cut time**	20.6 sec	14.3 sec



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Cutter Body (MHRM Series)



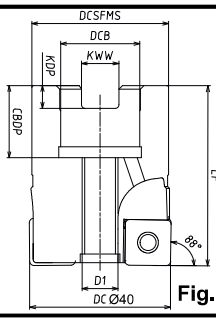


Fig.1

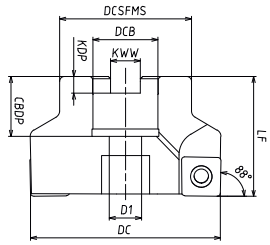


Fig.2

Rake Angle	Radial	- 9°
	Axial	- 5°

Insert : SNMZ120412 — 6mm — 88°

Catalogue No.	Stock	Dia. DC	Boss DCSFMS	Height LF	Bore Dia. DCB	Key Way Width KWW	Keyway Depth KDP	Mounting Depth CBDP	Bolt D1	Number Of Teeth	Weight (kg)	Fig.
MHRM4040RS04	●	40	33	40	16	8.4	5.6	18	M8	4	0.3	1
MHRM4050RS04	●	50	40	40	22	10.4	6.5	20	11	4	0.3	2
MHRM4063RS05	●	63	40	40	22	10.4	6.5	20	11	5	0.4	2
MHRM4063RS06	●	63	40	40	22	10.4	6.5	20	11	6	0.4	2
MHRM4080RS06	●	80	55	50	27	12.4	7.0	25	13	6	1.0	2
MHRM4080RS08	●	80	55	50	27	12.4	7.0	25	13	8	1.0	2
MHRM4100RS07	●	100	70	50	32	14.4	8.0	32	46	7	1.6	2
MHRM4100RS10	●	100	70	50	32	14.4	8.0	32	46	10	1.6	2
MHRM4125RS08	●	125	90	63	40	16.4	9.0	29	55	8	3.0	2
MHRM4125RS12	●	125	90	63	40	16.4	9.0	29	55	12	3.0	2
MHRM4160RS09	●	160	100	63	40	16.4	9.0	46	94	9	5.5	2
MHRM4160RS14	●	160	100	63	40	16.4	9.0	46	94	14	5.5	2
MHRM4200RS10	●	200	160	63	60	25.7	14.0	35	135	10	6.8	2
MHRM4200RS16	●	200	160	63	60	25.7	14.0	35	135	16	6.8	2

Spare items

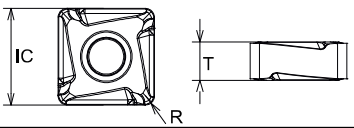
Cutter type	Mounting Screw	Mounting wrench	Insert Screw	Mounting Wrench
MHRM4040RS04	WB8-30	LH040	S-M0409N	TRD15
Rest of all	NA	NA		

Inserts (SNMZ120412)

Grade		PVD	
Application	High-Speed		
Rough & Face Milling	General Purpose	K	
	Roughing	K	
	Cat. No.	DMP3030K	Fig.
	SNMZ120412	●	1

Dimension

Fig.1



IC	T	R
12.70	4.76	1.2

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